UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2008*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-16 and 18-25* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-16 and 18-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

This office action is responsive to the Request for Continued Examination (RCE)

filed June 5, 2008. Claims 1, 19 and 25 are currently amended. Therefore, claims 1, 2,

4-16 and 18-25 remain pending in this application.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claim 1, 2, 4-16, and 18-25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wang et al. (US Patent Application Publication 2005/0071255 A1)

('Wang') in view of Bem (US Patent Application Publication 2005/0080772 A1), and

further in view of Golding et al. (US Patent 6,640,218 B1) ('Golding').

With respect to claims 1, 19 and 25, Wang teaches:

tracking clicks by users on data returned in a search result in response to a query

(element 126 in Figure 1, paragraph 27 lines 3-5, paragraph 28 lines 1-4); and

determining a user preference for a clicked data in accordance with a physical

position of the clicked data in the search result (paragraphs 26, 30, 34).

Wang does not explicitly teach calculating the quotient of actual clicks and clicks expected for the clicked data and a specific query.

Bem teaches using match confidence to adjust a performance threshold (see abstract) in which he teaches calculating the quotient of actual clicks and clicks expected for the clicked data and a specific query (paragraphs 75 lines 1-3 and 18-19, paragraphs 79-81, and paragraph 94).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Wang by the teaching of Bem because calculating the quotient of actual clicks and clicks expected for the clicked data and a specific query would enable an ad (search result) score to be adjusted using a score adjustment parameter, which takes into account a ratio of click-through data (paragraphs 59 and 79).

Further regarding claims 1, 19 and 25, Wang in view of Bem does not teach determining a context dependent user preference score in accordance with a weight table keyed to one of a plurality of types of user interfaces; or using the determined user preference to determine rankings for display of future search results.

Golding teaches estimating the usefulness of an item in a collection of information (see abstract), in which he teaches:

determining a context dependent user preference score in accordance with a weight table keyed to one of a plurality of types of user interfaces (column 8 lines 54-62) (*Golding teaches that SRP(rank) (i.e. user preference score) varies for different search engines, and is dependent upon a variety of factors, such as display format (i.e. user*

interface) of a given search engine. He further teaches that a lookup table (i.e. weight

table) may be used to determine SRP(rank)); and

using the determined user preference to determine rankings for display of future

search results (column 2 lines 48-52).

It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have further modified Wang by the teaching of Golding

because determining a context dependent user preference score in accordance with a

weight table keyed to one of a plurality of types of user interfaces; and using the

determined user preference to determine rankings for display of future search results

would enable a method do determine popularity measures of sets of criteria and to

determine the overall popularity of an item, with respect to a particular period of time

(Golding, column 2 lines 60-64, column 11 lines 53-60).

With respect to claims 2 and 20, Wang as modified teaches wherein determining

a user preference for a clicked data is further performed in accordance with a number of

clicks made by users on the data returned in the search result (Wang, paragraph 31

lines 6-9, paragraph 37 lines 1-3).

With respect to claim 4, Wang as modified teaches wherein determining a user

preference is performed periodically (Wang, paragraph 31).

With respect to claim 5, Wang as modified teaches wherein determining a user preference is performed weekly (Golding, column 11 lines 53-60).

With respect to claim 6, Wang as modified teaches wherein determining a user preference is performed in real time (Golding, column 11 line 65 – column 12 line 12).

With respect to claim 7, Wang as modified teaches further comprising determining values in a weight table based on user preferences for physical positions within search results independent of a query (Wang, paragraphs 33-34, page 8 claim 4; Golding, column 4 lines 47-53, column 8 lines 61-62) (*Golding teaches a relevance metric (weight) based on user preferences and Wang teaches adjusting a score to account for physical positions within search results*).

With respect to claims 8 and 21, Wang as modified teaches wherein determining a user preference for a clicked data in accordance with a physical position of the data in the search result is performed in accordance with weight values determined by observed user click behavior (Wang, paragraph 28).

With respect to claim 9, Wang as modified teaches wherein determining a user preference for a clicked data in accordance with a physical position of the data in the search result is performed in accordance with weight values determined by trial and error (Bem, paragraphs 71, 74 and 96).

With respect to claim 10, Wang as modified teaches wherein tracking clicks by users includes tracking: a query, a data fingerprint, and a position in the search results for a click on data from a search result for a specific query (Wang, paragraph 29).

With respect to claim 11, Wang as modified teaches wherein tracking clicks by users further includes tracking: a time the click occurred and user ID information (Wang, paragraph 29) (*Because there are multiple users of the system, it is implied that user ID information is tracked (Wang, paragraph 28 lines 1-3))*.

With respect to claims 12 and 22, Wang as modified teaches wherein determining a user preference further includes weighting click information so that clicks by users on data in unpopular positions in the search results migrate that data toward the top of future search results (Golding, column 7 lines 16-20).

With respect to claim 13, Wang as modified teaches further including normalizing the click information before the determining step (Wang, paragraph 33 lines 1-2).

With respect to claim 14 and 23, Wang as modified teaches wherein the data is image data (Wang, paragraph 27 lines 9-10).

With respect to claim 15, Wang as modified teaches wherein the data is

shopping data (Wang, paragraph 27 lines 7-8).

With respect to claim 16, Wang as modified teaches wherein the data is textual

data (Wang, paragraph 27 lines 9-10).

With respect to claim 18, Wang as modified teaches wherein determining a user

preference includes determining context dependent user preference scores in

accordance with a characteristic of the users clicking on the search results (Wang,

paragraph 35).

With respect to claim 24, Wang as modified teaches wherein determining a user

preference uses a plurality of weight tables corresponding to ones of a plurality of user

interfaces displaying the search result (Golding, column 3 lines 34-38, column 8 lines

54-62).

3.   Claim 1, 2, 4, 7-11, 13-16, 18-21, and 23-25 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Wang et al. (US 2005/0071255 A1) ('Wang') in view of Bem

(US 2005/0080772 A1), and further in view of Shu et al. (US Patent 2005/0114306 A1)

('Shu').

With respect to claims 1, 19 and 25, Wang teaches:

tracking clicks by users on data returned in a search result in response to a query (element 126 in Figure 1, paragraph 27 lines 3-5, paragraph 28 lines 1-4); and

determining a user preference for a clicked data in accordance with a physical position of the clicked data in the search result (paragraphs 26, 30, 34).

Wang does not explicitly teach calculating the quotient of actual clicks and clicks expected for the clicked data and a specific query.

Bem teaches using match confidence to adjust a performance threshold (see abstract) in which he teaches calculating the quotient of actual clicks and clicks expected for the clicked data and a specific query (paragraphs 75 lines 1-3 and 18-19, paragraphs 79-81, and paragraph 94).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Wang by the teaching of Bem because calculating the quotient of actual clicks and clicks expected for the clicked data and a specific query would enable an ad (search result) score to be adjusted using a score adjustment parameter, which takes into account a ratio of click-through data (paragraphs 59 and 79).

Further regarding claims 1, 19 and 25, Wang in view of Bem does not teach determining a context dependent user preference score in accordance with a weight table keyed to one of a plurality of types of user interfaces; or using the determined user preference to determine rankings for display of future search results.

Shu teaches integrated searching of multiple search sources (see abstract), in which he teaches:

determining a context dependent user preference score in accordance with a weight table keyed to one of a plurality of types of user interfaces (Figure 3, paragraphs 38-39, 59 and 110-116) ; and

using the determined user preference to determine rankings for display of future search results (paragraphs 40, 70-72, 110, 118 and 126).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have further modified Wang by the teaching of Shu because determining a context dependent user preference score in accordance with a weight table keyed to one of a plurality of types of user interfaces; and using the determined user preference to determine rankings for display of future search results would enable efficient searching by using client-specified weights to provide a unified list of results that are prioritized by rank (Shu, abstract).

With respect to claims 2 and 20, Wang as modified teaches wherein determining a user preference for a clicked data is further performed in accordance with a number of clicks made by users on the data returned in the search result (Wang, paragraph 31 lines 6-9, paragraph 37 lines 1-3).

With respect to claim 4, Wang as modified teaches wherein determining a user preference is performed periodically (Wang, paragraph 31).

With respect to claim 7, Wang as modified teaches further comprising determining values in a weight table based on user preferences for physical positions within search results independent of a query (Wang, paragraphs 33-34, page 8 claim 4; Shu, Figure 3, paragraphs 38-40) (*Shu teaches that a user may specify values in a weight table based on user preferences independent of a query and Wang teaches adjusting a score (user preference) to account for physical positions within search results*).

With respect to claims 8 and 21, Wang as modified teaches wherein determining a user preference for a clicked data in accordance with a physical position of the data in the search result is performed in accordance with weight values determined by observed user click behavior (Wang, paragraph 28).

With respect to claim 9, Wang as modified teaches wherein determining a user preference for a clicked data in accordance with a physical position of the data in the search result is performed in accordance with weight values determined by trial and error (Bem, paragraphs 71, 74 and 96).

With respect to claim 10, Wang as modified teaches wherein tracking clicks by users includes tracking: a query, a data fingerprint, and a position in the search results for a click on data from a search result for a specific query (Wang, paragraph 29).

With respect to claim 11, Wang as modified teaches wherein tracking clicks by users further includes tracking: a time the click occurred and user ID information (Wang, paragraph 29) (*Because there are multiple users of the system, it is implied that user ID information is tracked (Wang, paragraph 28 lines 1-3)).*

With respect to claim 13, Wang as modified teaches further including normalizing the click information before the determining step (Wang, paragraph 33 lines 1-2).

With respect to claim 14 and 23, Wang as modified teaches wherein the data is image data (Wang, paragraph 27 lines 9-10).

With respect to claim 15, Wang as modified teaches wherein the data is shopping data (Wang, paragraph 27 lines 7-8).

With respect to claim 16, Wang as modified teaches wherein the data is textual data (Wang, paragraph 27 lines 9-10).

With respect to claim 18, Wang as modified teaches wherein determining a user preference includes determining context dependent user preference scores in accordance with a characteristic of the users clicking on the search results (Wang, paragraph 35).

With respect to claim 24, Wang as modified teaches wherein determining a user preference uses a plurality of weight tables corresponding to ones of a plurality of user interfaces displaying the search result (Shu, Figure 3, paragraphs 38-40) (*Shu teaches that user specified rank weights may be used to supplement default rank weights; thus, in such a situation, a plurality of weight tables are used*).

4.   Claims 5, 6, 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (US 2005/0071255 A1) ('Wang') in view of Bem (US 2005/0080772 A1) and Shu et al. (US Patent 2005/0114306 A1) ('Shu'), as applied to claims 1, 2, 4, 7-11, 13-16, 18-21, and 23-25 above, and further in view of Golding et al. (US Patent 6,640,218 B1) ('Golding').

With respect to claim 5, Wang as modified teaches claim 1.

Wang as modified does not teach determining a user preference weekly.

Golding teaches estimating the usefulness of an item in a collection of information (see abstract), in which he teaches determining a user preference is performed weekly (column 11 lines 53-60).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have further modified Wang by the teaching of Golding because determining a user preference is performed weekly would enable a method do determine popularity measures of sets of criteria and to determine the overall popularity

of an item, with respect to a particular period of time (Golding, column 2 lines 60-64,

column 11 lines 53-60).

With respect to claim 6, Wang as modified teaches wherein determining a user

preference is performed in real time (Golding, column 11 line 65 – column 12 line 12).

With respect to claims 12 and 22, Wang as modified teaches wherein

determining a user preference further includes weighting click information so that clicks

by users on data in unpopular positions in the search results migrate that data toward

the top of future search results (Golding, column 7 lines 16-20).

Response to Arguments

5.   Applicant's arguments filed June 5, 2008 have been fully considered but they are

not persuasive. Applicant argues that the prior art fails to teach "determining a context

dependent user preference score in accordance with a weight table keyed to one of a

plurality of types of user interfaces," and further that the references do not take into

account a user preference score relating to specific types of different interfaces.

Examiner disagrees. Golding teaches that an SRP(rank) (i.e. user preference score)

varies for different search engines, and is dependent upon a variety of factors, such as

display format (i.e. user interface) of a given search engine. He further teaches that a

lookup table (i.e. weight table) may be used to determine SRP(rank). Thus it is clear

that Golding teaches determining a context dependent user preference score

(SRP(rank)) in accordance with a weight table (lookup table) keyed to one of a plurality

of types of user interfaces (display format of search engine).

6.   A second/different ground of rejection has also been made with respect to claims

1, 19 and 25.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Alicia M. Lewis whose telephone number is 571-272-

5599. The examiner can normally be reached on Monday - Friday, 9 - 6:30, alternate

Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alicia M Lewis/
Examiner, Art Unit 2164
August 13, 2008

/Charles Rones/

Supervisory Patent Examiner, Art Unit 2164